

Abigail J. Maley¹

CONTACT INFORMATION

Assistant Professor
Division of Integrated Sciences
Wilson College

Brooks Science Center 162
1015 Philadelphia Avenue
Wilson College
Chambersburg, PA 17201

Mobile: +1-814-233-9843
E-mail: ajmaley@gmail.com

EDUCATION

University of Illinois, Champaign, IL

Ph.D., Program in Ecology, Evolution, and Conservation Biology,
School of Integrative Biology, May 2015

- Thesis Topic: *Population genetics and the role of kinship on the intraspecific behavior of the Four-toed Salamander, Hemidactylum scutatum*
- Advisors:
 - Dr. Marlis R. Douglas
 - Dr. Christopher A. Phillips

M.S., School of Integrative Biology, May 2009

- Thesis Topic: *The relationship between anuran breeding, recruitment success and habitat variables within the Cache River Basin in southern Illinois*
- Advisor:
 - Dr. Christopher A. Phillips

Ohio Wesleyan University, Delaware, OH

B.A., Pre-Professional Zoology, May 2006

- *magna cum laude*

PROFESSIONAL POSITIONS

Lecturer and Laboratory Coordinator, Department of Biology, Trinity College, 2021-Present.

Assistant Professor, Division of Integrated Sciences, Wilson College, 2017-2021.

Visiting Assistant Professor, Department of Biology, Eastern Mennonite University, 2015-2017.

REFEREED JOURNAL PUBLICATIONS

- [1] Bell, R.C., D.G. Mulcahy, S.W. Gotte, **A.J. Maley**, C. Mendoza, G. Steffensen, J.C. Barron II, O. Hyman, W. Flint, R.W. Mcdiarmid, and D.S. Mcleod. 2020. The Type Locality Project: collecting genomic-quality, topotypic vouchers and training the next generation of specimen-based researchers. *Systematics and Biodiversity*, DOI: <https://doi.org/10.1080/14772000.2020.1769224>
- [2] Heath, K.D., E. Bagley, **A.J.M. Berkey**, D.M. Birlenbach, M.K. Carr-Markell, J.W. Crawford, M.A. Duennes, J.O. Han, M.J. Haus, S.M. Hellert, C.J. Holmes, B.C. Mommer, J. Ossler, R. Peery, L. Powers, D.R. Scholes, C.A. Silliman, L.R. Stein, and C.J. Wesseln. 2014. Amplify the signal: graduate training in broader impacts of scientific research. *Bioscience* 64: 517-523.

¹Last name changed to Berkey from Maley in 2009 and from Maley to Berkey in 2019.

- [3] Heinz, H.M., **A.J. Maley**, A.Z. Savit, R.W. Henderson, and R. Powell. 2004. Behaviour and time allotment in the West Indian snake, *Alsophis rufiventris* (Colubridae). Herpetol. Bull. 89: 22-25.
- [4] Heinz, H.M., A.Z. Savit, **A.J. Maley**, R.W. Henderson, and R. Powell. 2005. *Alsophis rufiventris*. Foraging and diet. Herpetol. Rev. 36: 186-187.
- [5] **Maley, A.J.** 2004. Species profile: *Alsophis rufiventris*. Iguana (J. Intl. Iguana Soc.) 11:147.
- [6] **Maley, A.J.**, A.Z. Savit, H.M. Heinz, R. Powell, and R.W. Henderson. 2005. *Alsophis rufiventris*. Cat. Amer. Amphib. Rept. 818: 1-4.
- [7] Savit, A.Z., **A.J. Maley**, H.M. Heinz, R.W. Henderson, and R. Powell. 2005. Distribution and activity periods of *Alsophis rufiventris* (Colubridae) on The Quill, St. Eustatius, Netherlands Antilles. Amphibia-Reptilia 26: 418-421.

INVITED TALKS

- [8] **Berkey, A.J.M.** 2014. Social behavior and kinship in the Four-toed Salamander, *Hemidactylium scutatum*. Presented: *Missouri State University, Biology Department Seminar Series*.
- [9] **Berkey, A.J.M.** 2016. Social behavior and kinship in the Four-toed Salamander, *Hemidactylium scutatum*. Presented: *James Madison University, Friday Herpetology Seminar*.
- [10] **Berkey, A.J.M.** 2018. Conserving endangered rhinos in South Africa. Presented: *Wilson College*.
- [11] **Berkey, A.J.M.** 2019. Conserving endangered rhinos in South Africa. Presented: *Wilson College, Board of Trustees Luncheon*.
- [12] **Berkey, A.J.M.** 2019. Chasing turtles: pursuing a career in science. Presented: *[Shippensburg University, Cumberland Valley Exploring Science, Technology, Engineering, Earth Science, and Mathematics Conference], Opening Speaker*.
- [13] **Berkey, A.J.M.** 2019. Conserving endangered rhinos in South Africa. Presented: *Tuscarora Wildlife Education Project*.
- [14] **Maley, A.J.** 2019. Conserving endangered rhinos in South Africa. Presented: *Wilson College, Institute for Retired Persons, Inc.*
- [15] **Maley, A.J.** 2019. Auditory and visual signals in the Ecuadorian hermit crab, *Coenobita compressus*. Presented: *Wilson College*.

CONFERENCE TALKS

- [16] **Berkey, A.J.M.**, M.R. Douglas, and C.A. Phillips. 2013. Genetic structure of the Four-toed Salamander at two spatial scales. Presented: *73rd Midwest Fish and Wildlife Conference*.
- [17] **Berkey, A.J.M.** 2013. Influence of kinship on fine-scale spatial distribution of the Four-toed Salamander, *Hemidactylium scutatum*. Presented: *2013 Joint Meeting of Ichthyologists and Herpetologists*.
- [18] **Berkey, A.J.M.** 2014. Influence of kinship on fine-scale spatial distribution of the Four-toed Salamander, *Hemidactylium scutatum*. Presented: *74th Midwest Fish and Wildlife Conference*.
- [19] **Berkey, A.J.M.**, M.R. Douglas, and C.A. Phillips. 2014. Influence of kinship on the social behavior of the Four-toed Salamander, *Hemidactylium scutatum*. Presented: *6th Conference on the Biology of the Plethodontid Salamanders*.

- [20] **Berkey, A.J.M.**, M.R. Douglas, C.A. Phillips. 2014. Influence of kinship on the social behavior of the Four-toed Salamander, *Hemidactylium scutatum*. Presented: *2014 Joint Meeting of Ichthyologists and Herpetologists*.
- [21] **Berkey, A.J.M.**, M.R. Douglas, C.A. Phillips. 2016. Population genetics of the Four-toed Salamander, *Hemidactylium scutatum*, at local and regional scales. Presented: *2016 Joint Meeting of Ichthyologists and Herpetologists*.
- [22] **Maley, A.J.** 2021. Antennae movements and visual signaling in the Ecuadorian hermit crab, *Coenobita compressus*. Presented: *96th Annual Meeting of the Pennsylvania Academy of Science*.

CONFERENCE
POSTERS

- [23] **Maley, A.J.**, L. Blyth, N.M. Nillegoda, E.H. Burt Jr., and J.M. Ichida. 2004. Avian saliva: a tool for controlling feather-degrading bacilli or a source for microorganisms. *2004 Wilson Ornithological Society and Association of Field Ornithologists Joint Meeting*.
- [24] **Maley, A.J.** and J. Purwar. 2005. Reproductive development in the salamander: comparison of captive and wild *Ambystoma* species. *Ohio Wesleyan University Summer Science Research Symposium*.
- [25] **Maley, A.**, J. Purwar, and S. Leupen. 2006. Pattern of GnRH release in an ambystomid salamander, the axolotl (*Ambystoma mexicanum*). *Ohio Physiological Society*.
- [26] **Maley, A.J.** 2007. The relationship between anuran call survey results and reproduction and recruitment. *2007 Joint Meeting of Ichthyologists and Herpetologists*.
- [27] **Berkey, A.J.M.**, M.R. Douglas, and C.A. Phillips. 2011. Cross-amplification of microsatellite markers designed for the genus *Plethodon* in the Four-toed Salamander (*Hemidactylium scutatum*). *2011 Joint Meeting of Ichthyologists and Herpetologists*.
- [28] **Berkey, A.J.M.**, M.R. Douglas, and C.A. Phillips. 2013. Genetic structure of the four-toed salamander at two spatial scales. *15th Annual Graduate Student Symposium*.
- [29] **Berkey, A.J.M.** 2013. Amplify the signal: communicating science beyond a science audience. *Public Engagement Symposium: Celebrating Excellence in Public Engagement*.
- [30] Mongold, B., C. Mendoza, G. Steffenson, **A.J.M. Berkey**, R. Bell, W. Flint, S. Gotte, O. Hyman, R. McDiarmid, D. McLeod, and D. Mulcahy. 2017. Collecting genomic-quality, topotypic vouchers for salamanders in Virginia. *2017 Joint Meeting of Ichthyologists and Herpetologists*.
- [31] McLeod, D.S., W. Flint, O. Hyman, G. Steffenson, **A.J.M. Berkey**, C. Mendoza, R. Bell, D. Mulcahy, R. McDiarmid, and S. Gotte. 2018. Biodiversity Information Serving Our Nation (BISON): adding tools to the conservation toolbox. *Annual Southeast Partners in Amphibian and Reptile Conservation Meeting*
- [32] **Berkey, A.J.M.**, D.S. McLeod, R. Bell, W. Flint, S. Gotte, O. Hyman, R. McDiarmid, C. Mendoza, D. Mulcahy, and G. Steffenson. 2018. Biodiversity Information Serving Our Nation (BISON): adding new tools to the conservation toolbox. *2018 Joint Meeting of Ichthyologists and Herpetologists*.
- [33] **Berkey, A.J.M.** 2019. Auditory and visual signals in the Ecuadorian hermit crab, *Coenobita compressus*. *95th Annual Meeting of the Pennsylvania Academy of Science*.

OTHER
PUBLICATIONS

- [34] **Berkey, A.J.M.** 2012. Science Politely: Inbreeding and the hidden importance of salamander dating. Smile Politely: Champaign-Urbana's Online Magazine. Retrieved 11 March 2013 from http://www.smilepolitely.com/culture/newt_meets_girl_inbreeding_and_the_hidden_importance_of_salamander_dating/.

GRANTS

- [1] Co-PI with Christopher A. Phillips, "Utility of anuran call-survey data for estimating occupancy, abundance, and reproductive success in the Cache River Basin," Illinois Department of Natural Resources, State Wildlife Grant Program. 2007-2010. \$40,000.
- [2] PI, "Presence of the bird-voiced treefrog, *Hyla avivoca*, according to call surveys in southern Illinois," Illinois Department of Natural Resources, Wildlife Preservation Fund. 2007-2008. \$2,000.
- [3] PI, "Variation in four-toed salamander, *Hemidactylium scutatum*, microhabitat use across age groups and sexes," Chicago Herpetological Society. 2008-2012. \$500.
- [4] PI, "Surveys for nesting sites of the four-toed salamander at Middle Fork State Fish and Wildlife Area," Illinois Department of Natural Resources, Wildlife Preservation Fund. 2009-2010. \$2,000.
- [5] PI, "Gene flow among populations of the four-toed salamander, *Hemidactylium scutatum*," Illinois Endangered Species Protection Board. 2010-2012. \$5,000.
- [6] PI, "Genetic variation in populations of the four-toed salamander at the Middle Fork State Fish and Wildlife Area," Illinois Department of Natural Resources, Wildlife Preservation Fund. 2010-2012. \$2,000.
- [7] PI, Program in Ecology, Evolution, and Conservation Biology, Travel Grant, 2013. \$250.
- [8] PI, "Kin recognition and intraspecific aggression in the Four-toed Salamander, *Hemidactylium scutatum*", Program in Ecology, Evolution, and Conservation Biology, Summer Research Grant. 2013. \$1,000.
- [9] PI, "Kin recognition and social behavior in the Four-toed Salamander, *Hemidactylium scutatum*," Francis M. and Harlie M. Clark Research Support Grant, 2013. \$1,000.
- [10] PI, Program in Ecology, Evolution, and Conservation Biology, Travel Grant, 2014. \$500.
- [11] PI, "Kin recognition and intraspecific aggression in the Four-toed Salamander, *Hemidactylium scutatum*," Program in Ecology, Evolution, and Conservation Biology, Summer Research Grant. 2014. \$1,000.
- [12] Co-PI w/ Rayna Bell, David McLeod, Oliver Hyman, Billy Flint, Roy McDiarmid, Steve Gotte, Dan Mulcahy, "Type localities for North American vertebrates to be developed by NMNH scientists with USGS BISON application," Smithsonian Institution, Global Genome Initiative Rolling Awards Program. 2016. \$9,940.
- [13] PI, "Auditory and visual signals in the Ecuadorian hermit crab, *Coenobita compressus*," Wilson College, Summer Research Stipend. 2018. \$2,000.

MAJOR SERVICE

Audiovisual Technician

Program in Ecology, Evolution, and Conservation Biology Weekly Seminar Series, University of Illinois. 2011-2012.

Planning Committee Member

Program in Ecology, Evolution, and Conservation Biology Weekly Seminar Series, University of Illinois. 2012-2015.

Book Raffle Volunteer

Joint Meeting of Ichthyologists and Herpetologists, American Society of Ichthyologists and Herpetologists. 2013.

Admissions Committee Member

Program in Ecology, Evolution, and Conservation Biology, University of Illinois. 2014.

Spring STEM Celebration Poster Judge

Chemistry and Biology Department, Eastern Mennonite University. 2016.

Session Moderator

Joint Meeting of Ichthyologists and Herpetologists, Association of Ichthyologists and Herpetologists. 2016-2018.

Stoye Award Judge

Joint Meeting of Ichthyologists and Herpetologists, American Society of Ichthyologists and Herpetologists. 2016.

Nominating Committee Member

American Society of Ichthyologists and Herpetologists. 2017 & 2019.

Nominating Committee Chair

American Society of Ichthyologists and Herpetologists. 2018.

Poster Judge

Pennsylvania Academy of Science, 94th Annual Meeting of the Pennsylvania Academy of Sciences, 2018.

Judge

34th Annual Franklin Science and Technology Fair, 2018.

Professional Representative at Student Networking Event

Joint Meeting of Ichthyologists and Herpetologists, Society for the Study of Amphibians and Reptiles and the Herpetologists League. 2018.

Research/Conservation Volunteer

Conserving Endangered Rhinos in South Africa, Earthwatch Institute. 2018.

Volunteer

Hustle for Health Race, 2018 & 2019.

Volunteer

American Cancer Society Relay for Life 5k, 2018 & 2019.

Volunteer

Saran Wrap Fundraiser, Wilson College, Black Student Union, 2019.

Poster Judge

Pennsylvania Academy of Science, 95th Annual Meeting of the Pennsylvania Academy of Sciences, 2019.

Oral Presentation Judge

Pennsylvania Academy of Science, 95th Annual Meeting of the Pennsylvania Academy of Sciences, 2019.

Institutional Review Board Member

Wilson College. 2018-2019.

Institutional Review Board Co-Chair

Wilson College. 2019-2021.

Job Search Committee Member: Biology Lecturer

Wilson College. 2018 & 2019.

Phi Beta Kappa Induction Committee

Wilson College. 2018-2021.

Curriculum Committee Member

Wilson College. 2019-2021.

Curriculum Committee Secretary

Wilson College. 2020-2021.

Academic Programs Task Force

Wilson College. 2020.

Encompass: STEM for Lifelong Success Faculty Mentor

Wilson College. 2020-2021.

Advisor

Amphibian and Reptile Trust International. 2021-Present.

Manuscript Reviewer for:

Journal of the Pennsylvania Academy of Science

Natural Sciences Education

The American Midland Naturalist

Conservation Genetics

TEACHING
EXPERIENCE

Courses Taught - Primary Instructor

Wilson College, Chambersburg, PA

Contemporary Biology, 2017 - 2021

Marine Biology, 2017 & 2019

Conservation Biology, 2017 & 2019

Animal Behavior, 2018 & 2020

Ecology, 2018 & 2020

Invertebrate Zoology, 2019

Stewardship of Watershed Ecosystems, 2019

Experiential Tropical Ecology, 2019

Evolution, 2020

Eastern Mennonite University, Harrisonburg, VA

Food and Population, 2015 & 2017

Conservation Biology, 2015

Animal Form and Function, 2015 & 2016

Human Biochemistry, 2016 & 2017

Ecology, 2016 & 2017

Natural History of the Shenandoah Valley, 2016

Herpetology, 2016

Environmental Science, 2016

University of Illinois, Champaign, IL

Field Herpetology Techniques, 2013

Courses Assisted

Wilson College, Chambersburg, PA

General Biology II Lab, 2018

University of Illinois, Champaign, IL

Course Coordinator for Organismal and Evolutionary Biology Lab, 2011 & 2014

Online Module Developer for Organismal and Evolutionary Biology, 2014

Teaching Assistant for:

Organismal and Evolutionary Biology Lab, 2007 & 2014

Evolution, 2008

Introductory Microbiology Lab, 2009
Herpetology, 2010
Ecology, 2010 & 2012
Environmental Biology, 2011
Field Ecology, 2013 & 2015
Vertebrate Natural History, 2013
Organismal and Evolutionary Biology, 2015

Other Teaching Experience

Wilson College, Chambersburg, PA

Undergraduate Research Mentor for:

Design/Methods of Scientific Research, 2018 & 2020
Senior Research Seminar I, 2017 & 2019
Senior Research Seminar II, 2018 & 2020

University of Illinois, Champaign, IL

Undergraduate Research Mentor, 2011 -2013

Herpetological Consultant for Honors Biology Class Field Trip, 2012 -2014

Outreach Assistant, 2012 -2015

PROFESSIONAL DEVELOPMENT

- Using Informal Early Feedback. Center for Teaching Excellence, University of Illinois, Champaign, IL. February 13, 2008.
- Exploring the Multiple Purposes of Classroom Assessment Techniques. Center for Teaching Excellence, University of Illinois, Champaign, IL. March 7, 2008.
- Getting Started with Service-Learning Course Design Series: Service-Learning Implementation Tips. Center for Teaching Excellence, University of Illinois, Champaign, IL. April 9, 2008.
- Conflict & Conversation in College Teaching. Center for Teaching Excellence, University of Illinois, Champaign, IL. April 11, 2008.
- First International Wildlife Reintroduction Conference: Applying Science to Conservation. Alexander Center for Applied Population Biology, Lincoln Park Zoo, Chicago, IL. April 15 - 16, 2008.
- Oldie, but Goodie: Improve Your Teaching by Using Bloom's Taxonomy Highlights. Liberal Arts and Sciences Teaching Academy, College of Liberal Arts and Sciences, University of Illinois, Champaign, IL. March 4, 2009.
- TA-to-TA: Learning from Experienced TAs — Managing the College Classroom. Center for Teaching Excellence, University of Illinois, Champaign, IL. September 24, 2009.
- Writing in the Classroom: Generating Ideas, Sparking Discussions. Center for Teaching Excellence, University of Illinois, Champaign, IL. October 5, 2009.
- Graduate Student Writing Across the Curriculum Seminar. Center for Writing Studies, University of Illinois, Champaign, IL. January 10 - 11, 2013.
- Teaching Philosophy Basics for Graduate Students. Center for Teaching Excellence, University of Illinois, Champaign, IL. March 1, 2013.

- School of Integrative Biology Annual Teaching Retreat, School of Integrative Biology, University of Illinois, Champaign, IL. April 26, 2013.
- Communicating Science: Adapting Your Work for Policy Boards, Public, and Peers. 2013 Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM, July 13, 2013.
- How to Prepare for Academic Interviews. American Society of Ichthyologists and Herpetologists Graduate Student Workshop, 2013 Joint Meeting of Ichthyologists and Herpetologists, Albuquerque, NM, July 14, 2013.
- Social Media and Academic Applications. 2014 Joint Meeting of Ichthyologists and Herpetologists, Chattanooga, TN, August 3, 2014.
- Finding a Job in Academia: Undergraduate Institutions. College Teaching Effectiveness Network, University of Illinois, Champaign, IL, September 16, 2014.
- jmUDESIGN Summer Institute: Course Design. Center for Faculty Innovation, James Madison University, Harrisonburg, VA, June 13-17, 2016.

PROFESSIONAL MEMBERSHIPS

- Phi Beta Kappa, Member, 2006–2020
- Phi Eta Sigma National Honor Society, Member, 2002 – 2006
- Sigma Xi Honor Society, Member, 2006
- Phi Sigma Biological Honors Society, Member, 2006
- Theta Alpha Kappa Honor Society, Member, 2006
- Society for the Study of Amphibians and Reptiles (SSAR), Member, 2007-2011
- American Society of Ichthyologists and Herpetologists (ASIH), Member, 2011-2018
- Association for Biology Laboratory Education (ABLE), Member, 2015-Present
- Pennsylvania Academy of Sciences (PAS), Member, 2018-Present

AWARDS

Ohio Wesleyan University

- Presidential Scholarship, 2002–2006
- Florence Leas Prize for exceptional ability and outstanding performance in Mathematics, Spring 2003
- National Collegiate Physical Sciences Award, Spring 2006

University of Illinois

- Graduate Teacher Certificate, Center for Innovation in Teaching & Learning, 2013.
- Teacher Scholar Certificate, Center for Innovation in Teaching & Learning, 2008.
- List of Teachers Ranked as Excellent by Their Students, Fall 2007, Fall 2010, Fall 2012, Fall 2013, Spring 2014
- John G. and Evelyn Hartman Heiligenstein Outstanding Teaching Assistants Award, School of Integrative Biology, Spring 2013.
- Outstanding PEEC Fellowship, Program in Ecology, Evolution, and Conservation Biology (PEEC), Spring 2014.
- Most Outstanding Talk by a Ph.D. Candidate, Graduates in Ecology, Evolution, and Conservation Biology (GEEB) Annual Symposium, Program in Ecology, Evolution, and Conservation Biology, Spring 2015.

73rd Midwest Fish and Wildlife Meeting

- Finalist for the 2012 Janice Lee Fenske Memorial Award, December 2012.
- 73rd Midwest Fish and Wildlife Meeting Best Student Oral Presentation - Wildlife, December 2012.

Wilson College

- Joan M. Thuebel '52 Earthwatch Prize, April 2018.
- Donald F. Bletz Award for Excellence in Teaching, May 2019.
- Joan M. Thuebel '52 Earthwatch Prize, April 2020.

OTHER MEETING
ATTENDANCE

- 84th Meeting of the Wilson Ornithological Society & the 80th Meeting of the Association of Field Ornithologists, March 19-23, 2003.
- 85th Meeting of the Wilson Ornithological Society & the 81st Meeting of the Association of Field Ornithologists, April 22-25, 2004.
- 3rd Hellbender Symposium, June 10-13, 2007.
- 1st International Wildlife Reintroduction Conference, April 15-16-2008.
- 70th Midwest Fish and Wildlife Conference, Dec 6-9, 2009.
- 4th Hellbender Symposium, June 21-23, 2009.
- 94th Annual Meeting of the Pennsylvania Academy of Sciences, March 23-25, 2018.
- 2019 South Mountain Research Corp and Science Summit, April 11, 2019.
- 2021 Tri-County Watershed Association and Partners Meeting, March 22, 2021.